PART 70 MINOR SOURCE MODIFICATION
OFFICE OF AIR QUALITY

Kobelco Metal Powder of America, Inc.
1625 Bateman Drive
Seymour, Indiana 47274

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 071-14702-00016	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary metal powder manufacturing operation.

Responsible Official:	Ron Modrzynski
Source Address:	1625 Bateman Drive, Seymour, Indiana 47274
Mailing Address:	1625 Bateman Drive, Seymour, Indiana 47274
General Source Phone Number:	812-522-3033
SIC Code:	3311A
County Location:	Jackson
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) one (1) new Premix line consisting of the following equipment:

(1) one (1) blender, identified as BL-1, with a maximum production capacity of 5 tons of product per batch (or 6,666 pounds of product per hour), with a process bag filter (BF-1) used to insure proper condenser operation, and a toluene condenser (HX-1), vacuum pump (Vacuum Pump-4), and chiller unit (CH-1) with pump (Pump-5) to recover toluene solvent, exhausting through one (1) stack (ID No. SS-1);
(2) one (1) 245 gallon toluene main storage tank, identified as T-1, with one (1) pump (Pump-1);
(3) one (1) 245 gallon toluene and binder storage tank, identified as T-2, with one (1) pump (Pump-2);
(4) one (1) 245 gallon condensate return tank, identified as T-3, with one (1) pump (Pump-3);
(5) one (1) 100 gallon mixing tank, identified as T-4;
(6) one (1) 80 gallon charging tank, identified as T-5;
(7) one (1) 115 gallon toluene condensate tank, identified as T-6, with one (1) pump (Pump-6); and
(8) one (1) area bag filter (BF-2) for industrial hygiene purposes.

(b) one (1) base metal powder and additive process for the new Premix line blender consisting of the following:

(1) one (1) bulk pack lift conveyor (CL-1);
(2) one (1) 5 ton base powder charging hopper (H-1); and
(3) one (1) base powder lift conveyor (CL-2).

(c) one (1) laboratory scale pilot blender line (LSP-1) consisting of the following equipment:

(1) one (1) 100 gallon binder preparation tank, identified as T-7;
(2) one (1) 10 gallon charging tank, identified as T-8;
(3) one (1) blender, identified as BL-2, with a maximum production capacity of 500 pounds of product per batch, with a process dust collector (BF-3) to insure proper condenser operation, and a toluene condenser (HX-2), vacuum pump (Vacuum Pump-2), and chiller unit (CH-2) with pump (Pump-1) to recover toluene solvent; and
(4) one (1) 20 gallon condensate tank, identified as T-9.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) one (1) new auxiliary spare 22 ton capacity blender (BL-3) for the old premix lines (insignificant activities). There are no emission increases associated with the addition of this blender since it is used only as a back-up blender for the existing line and does not increase the production capacity of the old premix lines.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.9 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.11 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.12 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) one (1) new Premix line consisting of the following equipment:

(1) one (1) blender, identified as BL-1, with a maximum production capacity of 5 tons of product per batch (or 6,666 pounds of product per hour), with a process bag filter (BF-1) used to insure proper condenser operation, and a toluene condenser (HX-1), vacuum pump (Vacuum Pump-4), and chiller unit (CH-1) with pump (Pump-5) to recover toluene solvent, exhausting through one (1) stack (ID No. SS-1);
(2) one (1) 245 gallon toluene main storage tank, identified as T-1, with one (1) pump (Pump-1);
(3) one (1) 245 gallon toluene and binder storage tank, identified as T-2, with one (1) pump (Pump-2);
(4) one (1) 245 gallon condensate return tank, identified as T-3, with one (1) pump (Pump-3);
(5) one (1) 100 gallon mixing tank, identified as T-4;
(6) one (1) 80 gallon charging tank, identified as T-5;
(7) one (1) 115 gallon toluene condensate tank, identified as T-6, with one (1) pump (Pump-6); and
(8) one (1) area bag filter (BF-2) for industrial hygiene purposes.

(b) one (1) base metal powder and additive process for the new Premix line blender consisting of the following:

(1) one (1) bulk pack lift conveyor (CL-1);
(2) one (1) 5 ton base powder charging hopper (H-1); and
(3) one (1) base powder lift conveyor (CL-2).

(c) one (1) laboratory scale pilot blender line (LSP-1) consisting of the following equipment:

(1) one (1) 100 gallon binder preparation tank, identified as T-7;
(2) one (1) 10 gallon charging tank, identified as T-8;
(3) one (1) blender, identified as BL-2, with a maximum production capacity of 500 pounds of product per batch, with a process dust collector (BF-3) to insure proper condenser operation, and a toluene condenser (HX-2), vacuum pump (Vacuum Pump-2), and chiller unit (CH-2) with pump (Pump-1) to recover toluene solvent; and
(4) one (1) 20 gallon condensate tank, identified as T-9.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 2-7-10.5(d)(5)]

The consumption of toluene solvent in the new Premix line, including the base metal powder and additive process, and the laboratory scale pilot blender line shall not exceed 2,656 gallons per twelve (12) consecutive month period such that the limited potential to emit of VOC, any single HAP, and total HAPs shall be less than 25, 10, and 25 tons per 12 consecutive month period, respectively. The consumption of toluene solvent shall be calculated as follows:

Toluene solvent consumption (gallons) = [Toluene solvent input to the new Premix line blender (BL-1) (gal) - Toluene solvent recovered in the toluene condenser (HX-1) (gal)] + [Toluene solvent input to the pilot blender (BL-2) (gal) - Toluene solvent recovered in the pilot toluene condenser (HX-2) (gal)]

This consumption limit is required to limit the potential to emit of VOC and total HAPs each to less than 25 tons per 12 consecutive month period, and to limit the potential to emit of any single HAP to less than 10 tons per 12 consecutive month period. Compliance with this limit makes this a Part 70 minor source modification pursuant to 326 IAC 2-7-10.5(d)(5)(A).

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the new Premix line shall not exceed 9.19 pounds per hour when operating at a process weight rate of 6,666 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

(b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the laboratory scale pilot blender shall not exceed 1.23 pounds per hour when operating at a process weight rate of 333.3 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.4 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs)

Compliance with the VOC/HAP usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the solvent manufacturer.

D.1.5 VOC and HAP Emissions

Compliance with Condition D.1.1 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound and HAP consumption for the twelve (12) month period.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.6 Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the toluene consumption limit and/or the HAP and VOC emission limits established in Condition D.1.1.

(1) The amount and HAP/VOC content of the solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(2) A log of the dates of use;

(3) The total toluene solvent input and total toluene solvent recovered for each month; and

(4) The weight of HAPs and VOCs emitted for each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Kobelco Metal Powder of America, Inc.
Source Address: 1625 Bateman Drive, Seymour, Indiana 47274
Mailing Address: 1625 Bateman Drive, Seymour, Indiana 47274
Source Modification No.: 071-14702-00016

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Source Modification Quarterly Report

Source Name: Kobelco Metal Powder of America, Inc.
Source Address: 1625 Bateman Drive, Seymour, Indiana 47274
Mailing Address: 1625 Bateman Drive, Seymour, Indiana 47274
Source Modification No.: 071-14702-00016
Facility: new Premix line blender and laboratory scale pilot blender
Parameter: Toluene emissions (VOC and HAP)
Limit: The consumption of toluene solvent in the new Premix line, including the base metal powder and additive process, and the laboratory scale pilot blender line shall not exceed 2,656 gallons per twelve (12) consecutive month period such that the limited potential to emit of VOC, any single HAP, and total HAPs shall be less than 25, 10, and 25 tons per 12 consecutive month period, respectively. The consumption of toluene solvent shall be calculated as follows:

Toluene solvent consumption (gallons) = [Toluene solvent input to the new Premix line blender (BL-1) (gal) - Toluene solvent recovered in the toluene condenser (HX-1) (gal)] + [Toluene solvent input to the pilot blender (BL-2) (gal) - Toluene solvent recovered in the pilot toluene condenser (HX-2) (gal)]

YEAR: _____

Month	Toluene Solvent Consumption This Month (gallons)			Toluene Solvent Consumption Previous 11 Months (gallons)			12 Month Total Toluene Solvent Consumption (gallons)		

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification

Source Background and Description

Source Name:	**Kobelco Metal Powder of America, Inc.**
Source Location:	**1625 Bateman Drive, Seymour, Indiana 47274**
County:	**Jackson**
SIC Code:	**3399**
Operation Permit No.:	**T071-7315-00016**
Operation Permit Issuance Date:	**Pending**
Source Modification No.:	**071-14702-00016**
Permit Reviewer:	**Trish Earls/EVP**

The Office of Air Quality (OAQ) has reviewed a modification application from Kobelco Metal Powder of America, Inc. relating to the construction and operation of a new Premix facility, a laboratory scale pilot blender line and auxiliary spare blender.

History

On July 27, 2001, Kobelco Metal Powder of America, Inc. submitted an application to the OAQ requesting to add an additional premix facility, a laboratory scale pilot blender line, and an auxiliary spare blender to their existing plant. Kobelco Metal Powder of America, Inc. applied for a Part 70 permit on December 2, 1996.

Source Definition

As previously determined during the Title V review, this metal powder manufacturing operation consists of a source with an on-site contractor:

(a) Kobelco Metal Powder of America, Inc., Plant ID No. 071-00016, the primary operation, is located at 1625 Bateman Drive, Seymour, Indiana 47274; and

(b) Praxair's hydrogen plant, the supporting operation, is located at 1625 Bateman Drive, Seymour, Indiana 47274.

IDEM has determined that Kobelco Metal Powder of America, Inc. and the hydrogen plant owned by Praxair are under the common control of Kobelco Metal Powder of America, Inc. These two plants are considered one source due to contractural control. Therefore, the term "source" in the Part 70 documents refers to both Kobelco Metal Powder of America, Inc. and the hydrogen plant owned by Praxair as one source.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

(a) one (1) new Premix line consisting of the following equipment:

(1) one (1) blender, identified as BL-1, with a maximum production capacity of 5 tons of product per batch (or 6,666 pounds of product per hour), with a process bag filter (BF-1) used to insure proper condenser operation, and a toluene condenser (HX-1), vacuum pump (Vacuum Pump-4), and chiller unit (CH-1) with pump (Pump-5) to recover toluene solvent, exhausting through one (1) stack (ID No. SS-1);
(2) one (1) 245 gallon toluene main storage tank, identified as T-1, with one (1) pump (Pump-1);
(3) one (1) 245 gallon toluene and binder storage tank, identified as T-2, with one (1) pump (Pump-2);
(4) one (1) 245 gallon condensate return tank, identified as T-3, with one (1) pump (Pump-3);
(5) one (1) 100 gallon mixing tank, identified as T-4;
(6) one (1) 80 gallon charging tank, identified as T-5;
(7) one (1) 115 gallon toluene condensate tank, identified as T-6, with one (1) pump (Pump-6); and
(8) one (1) area bag filter (BF-2) for industrial hygiene purposes.

(b) one (1) base metal powder and additive process for the new Premix line blender consisting of the following:

(1) one (1) bulk pack lift conveyor (CL-1);
(2) one (1) 5 ton base powder charging hopper (H-1); and
(3) one (1) base powder lift conveyor (CL-2).

(c) one (1) laboratory scale pilot blender line (LSP-1) consisting of the following equipment:

(1) one (1) 100 gallon binder preparation tank, identified as T-7;
(2) one (1) 10 gallon charging tank, identified as T-8;
(3) one (1) blender, identified as BL-2, with a maximum production capacity of 500 pounds of product per batch, with a process dust collector (BF-3) to insure proper condenser operation, and a toluene condenser (HX-2), vacuum pump (Vacuum Pump-2), and chiller unit (CH-2) with pump (Pump-1) to recover toluene solvent; and
(4) one (1) 20 gallon condensate tank, identified as T-9.

(d) one (1) new auxiliary spare 22 ton capacity blender (BL-3) for the old premix lines (insignificant activities). There are no emission increases associated with the addition of this blender since it is used only as a back-up blender for the existing line and does not increase the production capacity of the old premix lines.

Existing Approvals

The source applied for a Part 70 Operating Permit on December 2, 1996. The source has been operating under previous approvals including, but not limited to, the following:

(a) Construction Permit, PC (36) 1685, issued June 13, 1988;

(b) Operation Permit, 36-02-93-0110, issued January 25, 1989;

(c) Registration CP-071-2513-00016, issued June 1, 1992;

(d) CP-071-2546-00110 (PSD Permit), issued December 10, 1993;

(e) Minor Source Modification No. 071-12222-00016, issued August 31, 2000;

(f) Significant Source Modification No. 071-12450-00016, issued August 11, 2000.

Enforcement Issue

There are no pending enforcement actions related to this modification.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
SS-1	Condenser Vacuum Pump Discharge	25	2.5	18,000	ambient

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 27, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (1 page).

Potential To Emit Before Controls (Modification)

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	<0.1
PM-10	<0.1
SO_2	0.0
VOC	9.64
CO	0.0
NO_x	0.0

HAP's	Potential To Emit (tons/year)
toluene	less than 10
TOTAL	less than 25

Note: There is no increased utilization as a result of the addition of the additional premix facility, laboratory scale pilot blender line, and auxiliary spare blender because these units do not increase the maximum production capacity of metal powder. The new premix facility only allows the source to change the surface characteristics of some of the powder product to meet customer specifications and the laboratory scale pilot blender is only used to test different coatings for the metal powder to meet those customer specifications. The auxiliary spare blender is only used as a back-up blender for the existing premix lines and does not increase the production capacity of the old premix lines.

Justification for Modification

The Title V source is being modified through a Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(e) because pursuant to 326 IAC 2-7-10.5(d)(5)(A), the usage of solvent is being limited so that emissions of toluene, a VOC and a HAP, are being limited to less than 10 tons per year.

County Attainment Status

The source is located in Jackson County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Jackson County has been designated as attainment or unclassifiable for ozone.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	less than 100
PM-10	less than 100
SO_2	less than 100
VOC	less than 100
CO	greater than 100
NOx	less than 100

(a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the 28 listed source categories.

(b) These emissions are based upon the pending Title V application (T071-7315-00016) received by IDEM, OAM on December 2, 1996 and subsequent submittals and correspondences.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
New Premix Line and Laboratory Scale Pilot Blender	<0.1	<0.1	0.0	9.64	0.0	0.0	9.64
Total Emissions	0.0	0.0	0.0	9.64	0.0	0.0	9.64
PSD Significant Modification Threshold	25	15	40	40	100	40	n/a

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this modification.

State Rule Applicability - Entire Source

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which has the potential to emit (PTE) 10 tons per year of any single HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with the Maximum Achievable Control Technology (MACT). The emissions of any single HAP (toluene is the only HAP) from the proposed new premix line and laboratory scale pilot blender are limited to less than 10 tons per year, therefore, it is not subject to the requirements of this rule.

326 IAC 2-7-10.5 (Part 70 Permits, Source Modifications)

The total consumption of VOC, any single HAP, and total HAPs in the new Premix line, including the base metal powder and additive process, and the laboratory scale pilot blender line shall be limited to less than 25, 10, and 25 tons per 12 consecutive month period, respectively. Therefore, pursuant to 326 IAC 2-7-10.5(d)(5), this modification shall be processed as a minor source modification in accordance with 326 IAC 2-7-10.5(e).

326 IAC 6-3-2 (Process Operations)

(a) The particulate matter (PM) from the new Premix line shall not exceed 9.19 pounds per hour based on a process weight rate of 6,666 pounds per hour and the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The potential PM emissions from the new Premix line are less than 0.1 tons per year, therefore, this facility is in compliance with this rule.

(b) The particulate matter (PM) from the laboratory scale pilot blender shall not exceed 1.23 pounds per hour based on a process weight rate of 333.3 pounds per hour and the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The potential PM emissions from the pilot blender are less than 0.1 tons per year, therefore, this facility is in compliance with this rule.

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

This rule applies to new facilities constructed after January 1, 1980, with potential VOC emissions greater than 25 tons per year. This modification is not subject to the requirements of this rule since VOC usage is limited to less than 25 tons per year.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to this modification.

Conclusion

The operation of this new Premix facility, laboratory scale pilot blender and back-up blender for the existing Premix lines shall be subject to the conditions of the attached proposed Minor Source Modification No. 071-14702-00016.

Appendix A: Emissions Calculations

Company Name: Kobelco Metal Powder of America, Inc.
Address City IN Zip: 1625 Bateman Drive, Seymour, Indiana 47274
Source Modification No.: 071-14702
Plt ID: 071-00016
Reviewer: Trish Earls
Date: July 27, 2001

* Total estimated annual solvent input rate:	88,500	gallons/yr =	321.48	tons/yr VOC/HAP
** Loss Rate:	3.00%	=	311.83	tons/yr VOC/HAP recovered
		Solvent Density:	7.265	lbs/gallon
		*** Limited VOC/Toluene Emission Rate:	9.64	tons/yr

Notes:
pilot blender. Solvent used
is 100% toluene.
** Loss rate represents worst case expected and is the toluene input rate minus the toluene recovered.
Density (lb/gal) * 1 ton/2000
lbs]
Due to the intrinsic high density of the metal powder, particulate matter emissions from the premixing process are negligible (<0.1 tons/yr).